**Recommendations in Endoscopy COVID-19**

**General objectives**: a) To protect our patients from the risk of infection with SARS-CoV-2, and to provide them with high-quality care. b) To protect all healthcare professionals from the risk of infection with SARS-CoV-2. c) To preserve the normal operation of endoscopy units, and to prevent their closing down should a team member become infected with SARS-CoV-2.

**Step one: Decision making**

GI endoscopy units should strongly consider temporarily postponing elective, non-urgent endoscopy procedures, according to local human resources and local policies. Medical assessment of each case to classify endoscopy within:

- **NEEDS TO CONTINUE**
  - Threat to the patient’s life or permanent organ dysfunction
  - Acute Upper GI bleeding
  - Acute oesophageal obstruction – foreign bodies, bolus, pinhole, stricture/cancer where stenting is considered essential.
  - Endoscopic vacuum therapy for perforations/leaks.
  - ERCP for Acute cholangitis/jaundice secondary to malignant/benign biliary obstruction
  - ERCP for Acute biliary pancreatitis or/and cholangitis with stone and jaundice
  - Infected pancreatic collection/WON
  - Urgent inpatient nutrition support – PEG/NJ tube
  - Gastrointestinal obstruction needing urgent decompression/stenting

- **NEEDS DISCUSSION**
  - (time sensitive <8 weeks) Risk of rapidly worsening progression
  - Stable Lower GI Bleeding
  - (Calculate Oakland score)*
  - Urgent 2 Week Wait Cancer referrals – to be assessed on an individual basis. We recommend a group of consultants
  - Planned ESR/ESD for complex polyps/ high risk lesions
  - New suspected IBD – acute colitis
  - Cancer staging EUS – biopsy and/or staging
  - Small bowel endoscopy – ongoing transfusion dependent bleeding / suspected SB cancer on radiology/capsule endoscopy

- **DEFER UNTIL FURTHER NOTICE**
  - All routine symptomatic referrals
  - Bronchoscopic sampling**
  - Planned POEM, pneumatic dilatation for achalasia
  - Other elective therapy/intervention – PEG, structure distastion, APC for GAVE, RFA, pneumatic dilatation, amputation etc.
  - Bariatric endoscopy
  - Low-risk follow-up and repeat scopes – oesophagitis healing, gastric ulcer healing, ‘poor view’, check post therapy e.g. EMR/RFA/polypectomy (unless felt to be clinically high-risk/ high risk residua still present)
  - Surveillance- polyp DU, BD, Barrett’s (unless felt to be clinically high-risk/ high risk residua still present)
  - Routine/ non urgent Small bowel endoscopy
  - EUS for ‘suspicious’ indications – bilary stones, polyps, possible stones, submucosal lesions, pancreatic cysts without high-risk features
  - Other ERCP cases – stones with no recent cholangitis and a stent is in place; therapy for chronic pancreatitis; metal stent removal/change; ampullotomy follow ups etc.

*Oakland score 8 points or presentation has a 95% chance of safe discharge from the emergency department and is therefore classified as a minor bleed. ** FIT- bowel screening colonoscopy should probably stop until there has been discussion with local commissioners or Boards. This must include a proper risk assessment, which includes the likely beneﬁts against the risks to staff and the maintenance of an emergency service.

**Step two: Organization and preprocedural risk**

**WORKERS**
- Contact between healthcare professionals should be minimized.
- Only essential personnel should be present in cases. Telemedicine when possible.
- Healthcare personnel with respiratory symptoms or fever, and/or suspected to recently been in contact with someone with SARS-CoV-2 infection, should report ASAP to the Unit’s head.
- When possible, setting up differentiated work teams for endoscopy, ward, outpatient and on-duty. Consider teams (MD, RN, tech, anesthesia) that remain together for the entire day.
- Ideally work shifts should be assigned to teams for periods of 7-15 days, preventing their coming together both in space and in time.

**PATIENTS**

**Day before endoscopy**
- Any 15 DAYS PRIOR HISTORY of Fever, respiratory symptoms including cough and/or shortness of breath, or diarrhoea
- Family members or close contacts with the above symptoms
- Any contact with a suspected or confirmed case of COVID-19
- Recent travel high risk area

**Day of endoscopy**
- **TEMPERATURE CHECK BEFORE ENTERING THE ROOM**
- **HIGH RISK PATIENT**
  - Proceed with 3 days of non urgent
- **All**
  - Proceed with endoscopy

**FACILITIES**

- During the initial interview on the day of endoscopy, distance of at least 1 meter is recommended, + physical barrier, such as glass, if possible.
- Escorts (ideally <5yrs) don’t have access to the endoscopy unit.
- When exceptionally required, they should undergo risk assessment as the patients
- SARS-CoV-2 should be performed within a hospital room exclusive for these patients, e.g. (an operating room), ideally less pressurized. If not, well ventilated.

**Step three: Protective measures**

Whenver possible all patients entering the GI endoscopy unit should wear respiratory protective equipment (facial mask) and gloves after washing hands with alcoholic solution.

- Upper GI endoscopy of all kinds must be regarded as an aerosol prone procedure. Less evidence in lower endoscopy but still plausible.

- Following any endoscopic procedure, all surfaces and materials that have been in contact with the patient and/or his/her secretions, both in the endoscopy room and the recovery room must be disinfected and cleaned, paying special attention to items such as gurney rails and pulse oximeter sensors.

- Disinfection and cleaning will ensue with a disinfectant listed in the endoscopy unit’s approved list. These virusses become inactive after 5 minutes in contact with disinfectants such as bleach or a sodium hypochlorite solution containing 1000 ppm of active chlorine. Scope will follow the usual, standardized reprocessing and disinfection procedure.

- *AGA recommends all the non-urgent, non-elective upper GIE, non-high risk patients be deferred until there has been discussion with local commissioners or Boards. This must include a proper risk assessment, which includes the likely benefits against the risks to staff and the maintenance of an emergency service.

- Olympus recommends at the health workers in any GI procedure use of N95 or FFP2 or PAPR mask instead of surgical mask, gowns and use of double gloves, regardless of COVID status or upper/lower procedures.

- Level 1 protection
  - Surgical face mask
  - Surgical cap
  - Nitrile gloves
  - Protective eyewear

- Level 2 protection
  - FFP2 mask. ex: optionally surface/surgical mask + surgical cap + nitrile gloves + protective eyewear

- Level 3 protection
  - FFP3 high grade mask
  - Impermeable gown or hood + cap + panoramic goggle/face shield + nitrile gloves + shoe covers

- *Ideally, should the hospital situation indicate, protective materials should be available to dispose of after each examination. However, given the absolute exceptionality of the present crisis and severe shortage, disposable protective forms may have to be used more than once. Respirators used up to 4 h (up to 5 for Donning stations) Dr Masegosa

[Dr Masegosa]